

Serial No. 10/669,867
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Amendments To The Specification:

Please amend the paragraph beginning at p. 5 line 11 and ending at p. 6. line 10, as follows:

Referring now to Figure 1, a portion of an exemplary transition duct 10 is illustrated. The transition duct 10 is advantageously formed from a plurality of cooling panels 12 each of which are typically made from solid solution strengthened or precipitation strengthened wrought sheet superalloy materials such as nickel and cobalt-based alloys containing chrome, aluminum, titanium and other constituents, and attached together by nickel brazing or diffusion bonding. A ceramic thermal barrier coating, bond coating, or environmental coating (none shown) may be applied to a surface of the superalloy. A plurality of cooling channels or holes 14 are advantageously formed on at least one cooling panel 12 to cool the transition duct 10 via convection, effusion, impingement and the like cooling. Although the cooling holes 14 are illustrated with a rectangular geometry, other geometries could be used such as square, oval, circular and the like. A service crack 16 is shown extending longitudinally along a cooling channel 14 and vertically from near the cooling channel 14 to the exterior surface of the transition duct 10. This type of crack is commonly known as a channel crack. This exemplary illustrated crack has a width of about 0.05 mm, a length of about 6 mm, and a depth of about 1.5 mm. As previously noted, many other types of service cracks may form on the transition duct or other combustion turbine component such as a zipper crack, longitudinal panel crack, partial wall crack, through-wall crack, vane leading edge crack, blade trailing edge crack, exit hole radial crack, and the like as will be understood by those skilled in the art. Also, non-service cracks may form on the transition duct or other combustion turbine component such as those due to errors while manufacturing the transition duct or other combustion turbine component. Further, cracks, weaknesses, or spallation may also develop at or near geometrically complex portions of the transition duct or other turbine component such as cooling hole exit erosion, corner radii erosion and the like.